UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,624	02/19/2002	Yoko Kumagai	62807-040	9550

20277 7590 12/22/2006
MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER	
DOAN, TRANG T	
ART UNIT	PAPER NUMBER
2131	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	12/22/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/076,624
Filing Date: February 19, 2002
Appellant(s): KUMAGAI ET AL.

Gene Z. Rubinson
Registration No. 33,351
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/28/2006 appealing from the office action mailed 03/28/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Matsuyama et al. U.S Patent No. 6990583

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Examiner has maintained the art rejection in the previous office action by the foreign patent (EP 1130844), however a corresponding U.S. Patent (6990583) is applied in this application.

2. Claims 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuyama et al. (6990583) (hereinafter Matsuyama).

3. **Regarding to claim 11**, Matsuyama teaches generating, by the registration authority, a signature certify contents that are to be included in the public key certificate, out of contents registered with the registration authority (*Matsuyama: see figure 19, column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-5*); generating, by the registration authority, a certificate issuing request including the contents signed by the registration authority and the registration authority signature (*Matsuyama: see figure 19, column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-5*); sending the certificate issuing request from the registration authority to the issuing authority (*Matsuyama: column 22 lines 64-67 and column 23 lines 1-5*); and generating, by the issuing authority, the public key certificate including the contents signed by the

registration authority, the registration authority signature, issuing contents issued by the issuing authority, and an issuing authority signature signed by the issuing authority to certify the contents signed by the registration authority, the registration authority signature and issuing contents issued by the issuing authority (*Matsuyama: see figure 19, column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-42*).

4. **Regarding to claim 12**, Matsuyama teaches wherein the contents signed by the registration authority is a predetermined identifier to specify information to be certified by the pubic key certificate of the end entity (*Matsuyama: see figure 2, column 11 lines 18-42*).

5. **Regarding to claim 13**, Matsuyama teaches wherein the contents signed by the registration authority is a hash value calculated by applying a hash function to information to be certified by the public key certificate of the end entity (*Matsuyama: column 2 lines 30-45 and column 16 lines 1-67 and column 22 lines 31-67 and column 23 lines 1-5*).

6. **Regarding to claim 14**, Matsuyama teaches verifying, by a verifying party, the issuing authority signature with the contents signed by the issuing authority; and verifying, by the verifying party, the registration authority signature with the contents signed by the registration authority included in the public key certificate (*Matsuyama: column 17 lines 5-46 and column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-42*).

7. **Regarding to claim 15**, Matsuyama teaches acquiring, by a verifying party, information signed by the registration authority according to the identifier in the public

key certificate (*Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 3 lines 22-40 and column 22 lines 15-67 and column 23 lines 1-42*); calculating, by the verifying party, a hash value of the acquired information (*Matsuyama: column 1 lines 29-45 and column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5 -42*); decoding, by the verifying party, the registration authority signature included in the public key certificate, by using a public key of the registration authority (*Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5-42*); and checking by the verifying party, whether the hash value is identical to the decoded value (*Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5-42*).

8. **Regarding to claim 16**, Matsuyama teaches calculating, by a verifying party, a hash value of the information signed by the registration authority in the public key certificate (*Matsuyama: column 1 lines 29-45 and column 16 lines 1-67 and column 17 lines 1-46 and column 23 lines 5 -42*); decoding, by the verifying party, the registration authority signature included in the public key certificate, by using a public key of the registration authority; and checking by the verifying party, whether the hash value is identical to the decoded value (*Matsuyama: column 16 lines 1-67 and column 17 lines 1-46 and column 22 lines 15-67 and column 23 lines 5-42*).

9. **Regarding to claim 17**, Matsuyama teaches constructing and verifying, by the verifying party, a path from the certificate authority trusted by the verifying party, up to the public key certificate (*Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65*); verifying, by the verifying party, the registration authority signature

described in the public key certificate using the public key of the registration authority (*Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65*); and constructing and verifying, by the verifying party, a path from the certificate authority trusted by the verifying party up to the public key certificate of the registration authority (*Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65*).

10. **Regarding to claim 18**, Matsuyama teaches wherein the verifying party obtains the public key certificate of the registration authority from a public key certificate database of the issuing authority according to the registration authority name described on the public key certificate (*Matsuyama: see figure 17, column 20 lines 54-67 and column 21 lines 1-65*).

11. **Regarding to claim 19**, Matsuyama teaches wherein the verifying party obtains the public key certificate of the registration authority described in an extended region of the public key certificate to be verified (*Matsuyama: column 22 lines 6-67 and column 23 lines 1-42*).

12. **Regarding to claim 20**, Matsuyama teaches sending, by the registration authority, a certificate invalidation request to the issuing authority of the public key certificate of the registration authority (*Matsuyama: see figures 22 and 23, column 25 lines 25-67 and column 26 lines 1-37*); receiving, by the issuing authority, the certificate invalidation request (*Matsuyama: see figures 22 and 23, column 25 lines 25-67 and column 26 lines 1-37*); and invalidating, by the issuing authority, the public key certificate of the registration authority (*Matsuyama: see figures 22 and 23, column 25 lines 25-67 and column 26 lines 1-37*).

(10) Response to Argument

Appellant, on pages 7-8 of the appeal brief, argues that Matsuyama did not disclose "the public key certificate includes contents signed by the registration authority and the registration authority signature". The Examiner respectfully disagrees. Matsuyama discloses the contents of the certificate to be signed by the root registration authority (hereinafter Root RA) (*see figures 6-7 and lines 24-28 of column 20: where the certificates refer as the contents cited in claim 11*) and the Root RA signature (*see figure 16A and lines 24-34 of column 20:where the Root RA is the registration authority, the Root RA attaches its signature to the certified certificates and then send the certificate issuing request including its signature and the certified certificates to the issuer authority*), which is equivalent to Appellant's use of the "contents signed by the registration authority and the registration authority signature" cited in claim 11. Figure 16A, Root RA (1601) transmits the certificate issuing request which includes certificates signed by the Root RA and the Root RA signature (*see item 2*). The issuer authority (1602) signs the certificate that has been signed by the Root RA and the Root RA signature (*see item 5*) and issues the public key certificate to the Root RA (*see item 4*). It is noted that the Examiner has relied on figure 19 for claim 11, however figure 16A discloses more pertinent embodiment as related to claimed invention and is cited to clearly point out where the certificates signed by Root RA and the Root RA signature. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co.

v.Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

Accordingly, for reasons discussed above, the examiner maintains the teaching of Matsuyama meets the claim limitations recited in claim 11. Dependent claims 12-20 depend directly or indirectly from claim11, thus inheriting all of the limitations of that independent claim. Therefore, the examiner maintains the rejections of claims 12-20.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Trang Doan

GILBERTO BARRON JR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Conferees:

Gilberto Barron GB

Matthew Smithers MAS